

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Southside Chattanooga Lead - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IV

**Subject:** POLREP #12  
Residential Soil Removal Continues  
Southside Chattanooga Lead  
  
Chattanooga, TN  
Latitude: 35.0333793 Longitude: -85.3057271

**To:** Jim Mc Guire, ERRB Reg 4

**From:** Perry Gaughan, On Scene Coordinator

**Date:** 3/18/2013

**Reporting Period:** Mar 4th through Mar 16th, 2013

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	B4J4	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	8/19/2012
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	9/17/2012	<b>Start Date:</b>	9/24/2012
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Lead contaminated soil on 52 properties being removed as a time critical removal under CERCLA.

#### 1.1.2 Site Description

The Tennessee Department of Environmental Conservation (TDEC) requested the EPA Region 4 Emergency Response and Removal Branch's (ERRB's) assistance after discovering that the lawns of one residence and potentially several more were contaminated with lead along Read Avenue near downtown Chattanooga. Initially, one resident along Read Avenue presented to the emergency room with severe fatigue and abdominal pain. Emergency room blood work indicated lead levels approaching 20 micrograms per deciliter (ug/dl) which alerted TDEC to conduct follow up assessments. TDEC requested assistance from ERRB to characterize the soil around the home and an initial assessment was conducted with SESD (Science and Ecosystem Support Division) Athens in which three homes were assessed as well as a public park and playground area at 1700 Mitchell Avenue. Ten samples were collected and two samples showed elevated lead levels exceeding 400 ppm.

### **1.1.2.1 Location**

The Southside Chattanooga Lead Site is located along Read, Mitchell and Carr Avenues south of Main Street in Chattanooga, Hamilton County, Tennessee (Latitude: 35.0456, Longitude: -85.3097). The area is a blend of young, middle income couples who are renovating older constructed homes and low to middle income retired couples who have resided in the area for 20 plus years. The vast majority of homes were built in the early 1900's.

The Southside Chattanooga area is immediately adjacent to downtown Chattanooga and was prone to flooding during the early 1900's and prior to the development of damming and flood control measures by the Tennessee Valley Authority (TVA). Several of the homes along Read and Mitchell Avenues appear to have been built on 4-5 feet of clay fill.

### **1.1.2.2 Description of Threat**

### **1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**

In response to a request from TDEC, the EPA Region 4 ERRB with assistance from SESD Athens, conducted two follow up assessments of the Read and Mitchell Avenue area in January and April 2012. Of the 81 homes (162 front and back yards) assessed near downtown Chattanooga, 68 lawns (42 %) have lead levels exceeding 400 ppm. Lead levels range from 400 – 4000 ppm. The 4000 ppm sample was collected from a lawn along the 1600 block of Read Ave and the sample contained very dark fine material, most likely a high concentration of bag-house dust.

In addition, the Battle Academy Elementary School which neighbors the site was sampled in mid June 2012. A 20' by 20' grid was laid over the school property and 140 grids were screened using X-ray fluorescence spectroscopy (XRF). No significant lead contamination was found and all lead levels were below 55 ppm.

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

#### **March 4th through Mar 8th, 2013**

On March 4th, the ERRS crew placed a river-rock path where cement pavers were formerly located alongside the 1619 Read structure. The crew repaired the driveway at 1625 Read with asphalt and cemented the rock wall at this location. Plants were purchased for 1624 Read and these were placed according to the owners discretion. The crew also pressure washed the driveway at 1619 Read and installed the final pieces of fencing at 1717 Read. The crew also placed grass seed at 1609 and 1618 Read.

On March 5th, The crew pulled the fence and shrubs along 1721 and 1723 Read in preparation for removal at 1723 Read in the future. This was completed at approximately 0930 hours and work ended at the site due to rainfall. START spoke to the owner of this property and she does not wish for the shrubs to be replaced. The sidewalk may also be removed and replaced with river rock to obtain the contaminated material along the sidewalk. Sod was delivered at 1100 hours on this day.

On March 6th, the crew placed sod at 1624 Read. The crew began removal efforts at 1622 Read by removing the fencing to obtain access to the front yard. Once removed, the crew began removing contaminated soil from the front yard at approximately 0930. Contamination was observed along the 1624/1622 Read property line. The fence on 1622 Read was removed to pull out the contaminated soil. START conducted an assessment at 1727 Read – observed contamination along the front foundation, along the side walk adjacent to 1725 Read, and in about half of the back yard.

On March 7th, the crew began backfilling on the right side of the property at 1622 Read. Grading and compacting this area took most of the day. At approximately 1330, the crew began removing contaminated material from the left side of the 1622 Read property. While removing material from 1622 Read, some contamination was observed on the 1620 Read parcel – will be addressed at a later date.

The crew placed a rock pad at the entrance of the shed in the back yard of 1622 Read. This was done in an effort to move 'junk' items out of the way of work.

On March 8th, the crew backfilled the left side of the 1622 Read property. Once backfilled, the areas were compacted and sodded. During grading efforts on the right side of the property (after tracking in this area to obtain access to the other side of the property), a water line was ruptured. The crew conducted the repair by adding a new coupling. The affected area had been repaired before, as a coupling was already present at the broken area of the pipe. The crew continued to grade this area, compacted the soil and sodded the area. Also on this day, large stone that was placed at 110 E. Main Street was realigned per the owner of the property.

### **March 11th – March 15th, 2013**

On March 11th, rainfall limited site operations. The ERRS crew ensured the soil piles at the staging area were covered well and secured, and ended work early at the site.

On March 12th, the ERRS crew began work at the front yard of 1620 Read Avenue. By noon this day, the crew had completed removing contaminated material from the property and made way to complete removal at the back yard of 1622 Read (this back yard was used as access to 1620 Read). The crew completed removal at these two properties by 1645 hours.

On March 13th, the crew began placing clay and top soil at 1622 Read to make their way to the 1620 Read parcel. Once the top soil was placed, the areas were tamped. The 1620 Read parcel received two rows of sod at the front parcel to avoid run off and the remaining area was seeded and straw was placed. The back yard of 1622 Read only received a straw layer, later to be sodded and to place gravel for a driveway.

On March 14th, ERRS began removal efforts at the back yard of 1611 Read Avenue. Earlier during removal efforts at an adjacent parcel, an exceedance for lead was observed along the gravel driveway located at the back yard of 1611 Read, thus ERRS revisited this property to address the contaminated area. ERRS removed the contaminated material by approximately 1300 hours this day, and clay and top soil were placed at the back yard. A layer of gravel was placed where the former gravel parking pad was located. The crew placed sod in areas closest to the residential structure, and placed grass seed and straw in areas adjacent to the open lot (1609 Read).

On the morning of March 15th, the ERRS crew placed sod at the back lot of 1620 Read (closest to the residential structure to avoid run on onto the back patio), and placed sod around the gravel pad driveway placed in the back yard of 1622 Read. Once sod was placed, the crew moved to 1723 Read and began removing sections of fence in preparation for removal to take place next week at the property.

START contractors continue to assist with technical support, daily operations, post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf) and air sampling during excavation and staging of contaminated soils.

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the OSC plan to update Chattanooga City Council during February 2013. A specific date has not been set by City Council.

The OSC, Tenn Dept of Health and Tenn Dept of Environmental Conservation (TDEC) are currently preparing an assessment strategy for Chattanooga City Council addressing future lead assessments in the downtown area.

### **2.1.2 Response Actions to Date**

### **2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**

### **2.1.4 Progress Metrics**

<i><b>Waste Stream</b></i>	<i><b>Medium</b></i>	<i><b>Quantity</b></i>	<i><b>Manifest #</b></i>	<i><b>Treatment</b></i>	<i><b>Disposal</b></i>


## 2.2 Planning Section

No information available at this time.

## 2.3 Logistics Section

No information available at this time.

## 2.4 Finance Section

### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$1,300,000.00	\$880,000.00	\$420,000.00	32.31%
TAT/START	\$100,000.00	\$50,000.00	\$50,000.00	50.00%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$1,400,000.00</b>	<b>\$930,000.00</b>	<b>\$470,000.00</b>	<b>33.57%</b>

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

## 2.5 Other Command Staff

No information available at this time.

## 3. Participating Entities

### 3.1 Unified Command

### 3.2 Cooperating Agencies

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the OSC plan to update Chattanooga City Council during February 2013. A specific date has not been set by City Council.

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## 4. Personnel On Site

No information available at this time.

**5. Definition of Terms**

No information available at this time.

**6. Additional sources of information**

No information available at this time.

**7. Situational Reference Materials**

No information available at this time.